

ORIGINAL
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DEPARTMENT OF ENVIRONMENTAL RESOURCES

ENVIRONMENTAL PROTECTION

START

BUREAU SOLID WASTE MANAGEMENT

DIVISION OPERATIONS

CASE NAME NORTH CREEK RD. SITE # 70

NUMBER 25921 SW P-100987

ERIE COUNTY SOLID WASTE AUTHORITY

ORIGINAL
(Red)

September 27, 1974

Mr. Russell L. Crawford
Region VI Solid Waste Director
Pennsylvania Department of
Environmental Resources
900 North Hermitage Road
Sharon, Pennsylvania 16146

Dear Mr. Crawford:

In accordance with procedures, please find enclosed three (3) bound copies of the Application For Permit For Solid Waste Disposal Site Application Module, Phase 1; and Module 5A - Phase 1, Supplementary Geology and Groundwater Information for the North Creek Road Site (#70) of the Erie County Solid Wastes Authority.

Should you have any questions, please do not hesitate to contact this office.

Very truly yours,

Samuel Hayes
Chairman

Sh:fn

Enclosure

cc: Atty. Warren W. Bentz

Commonwealth of Pennsylvania
Department of Environmental Resources
Solid Waste Management

ORIGINAL
Permit Number

APPLICATION FOR PERMIT FOR SOLID WASTE
DISPOSAL and/or PROCESSING FACILITIES

See INSTRUCTIONS on Reverse Side

1. Applicant (Name and Address) Erie County Solid Wastes Auth. 606 W. Second Street Erie, Pa. 16507		2. Authorized Agent (Name, Title and Address) Mr. Samuel Hayes, Chairman 606 West Second Street Erie, Pa. 16507		DEPT. USE ONLY ID. No. <u>100987</u> Date Rec'd <u>9-30-74</u> Publ. Date <u>10-12-74</u> Date Issued _____	
3. Property Owner(s) (Name and Address) Fairview Evergreen Nursery 131 E. Water Street Fairview, Pa. 16423		4. Type of Operation <u>Sanitary Landfill</u>			
		5. Name of Facility <u>North Creek Rd. Site (#70)</u> Address of Facility <u>North Creek Rd.</u> ZIP <u>16423</u> City-Borough-Township <u>Girard Twp.</u> County <u>Erie</u>			
6. U.S.G.S. Map Location of Facility Map Name <u>Fairview, Pa.</u> Date <u>1957</u> photorevised <u>1969</u> 7.5' Quad <input checked="" type="checkbox"/> 15' Quad <input type="checkbox"/> Provide 7.5' Quad if published Center of Facility: LAT. <u>42° 00' 26"</u> LONG. <u>80° 22' 19"</u> Facility location measured from S.E. corner of Map: N.E. Corner - NORTH <u>2.25</u> in. WEST <u>15.95</u> in. N.W. Corner - NORTH <u>2.25</u> in. WEST <u>16.95</u> in. S.E. Corner - NORTH <u>.85</u> in. WEST <u>15.95</u> in. S.W. Corner - NORTH <u>.85</u> in. WEST <u>16.95</u> in.		7. General Information: Existing <input type="checkbox"/> Proposed <input checked="" type="checkbox"/> Number of acres proposed for permit <u>0 0 6 0.95</u> Total acres of the property <u>1 0 0 +</u> Planned life of the facility <u>10 to 20</u> years *Var., dependent on actual tonnage of solid waste Has this facility been included as a part of the Solid Waste Management Plan for the area? YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> Is County Commission's approval required? YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>			
8. The following documents are attached where applicable: Site Application Module phase I <input checked="" type="checkbox"/> phase II <input type="checkbox"/> Ground Water Module phase I <input checked="" type="checkbox"/> phase II <input type="checkbox"/> U.S.G.S. Topo Map <input checked="" type="checkbox"/> U.S.D.A. Soils Map <input checked="" type="checkbox"/> Large Scale Topo Map <input checked="" type="checkbox"/> (Min. scale 1" = 200') Design and Operational Plan(s) <input type="checkbox"/> Incinerator Modules A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D <input type="checkbox"/>		9. Documents prepared by: (Name, Title and Address) John K. Kane, AIPG Assistant Manager Environmental Division A.W. Martin Associates, Inc. 900 West Valley Forge Road King of Prussia, Pa. 19406 Telephone Number 215-265-2700			
10. AFFIDAVIT: COMMONWEALTH OF PENNSYLVANIA COUNTY OF <u>Erie</u> SS: Sworn and subscribed to before me this <u>25</u> Day of <u>Sept</u> 19 <u>74</u> <u>John C. Wagner</u> JOHN C. WAGNER, NOTARY PUBLIC ERIE, ERIE COUNTY My Commission Expires <u>COMMISSION EXPIRES FEB. 3, 1976</u> Member, Pennsylvania Association of Notaries		PRINT or TYPE Name to be Signed: Date: <u>Sept. 25, 1974</u> I, <u>Samuel Hayes</u> being duly sworn according to law, depose and say that I (am an officer or official of the applicant) and that the documents and statements submitted as part of this application are true and correct to the best of my knowledge and belief. Signature <u>Samuel Hayes</u>			

DATE: 10/1/82

ENVIRONMENTAL PROTECTION AGENCY
EPA FORM 100-1 (REV. 10-1-80)
SOLID WASTE DISPOSAL AND/OR PROCESSING
SITE APPLICATION MODULE
PAGE 1

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PREPARED BY: John K. Kane, A.W. Martin Associates, Inc. 900 W. Valley Forge Rd. Pa. 19406
King of Prussia, Pa.

PART I - LAND DISPOSAL FACILITY

A. SITE IDENTIFICATION

1. NAME OF SITE North Creek Rd. Site (#70)
2. ADDRESS OF SITE North Creek Rd.
Girard Township
Erie County, Pa.
3. SITE ACQUISITION (Check appropriate block)
☐ PRESENTLY OWNED
☐ WILL PURCHASE
☒ WILL LEASE FOR 15 YEARS
☐ WILL RENT
4. OWNER OF RECORD (Name & Address)
Fairview Evergreen Nursery
131 E. Water Street
Fairview, Pa.

B. FACILITY INFORMATION

1. IS THIS AN EXISTING FACILITY? ☐ Yes ☒ No
2. IS THIS A PROPOSED FACILITY? ☒ Yes ☐ No

PART II - GOVERNMENTAL APPROVAL

A. SITE APPROVAL FROM COUNTY AND MUNICIPALITY

1. IF THE SITE WILL BE IN A FUTURE, HAS THE PROPOSED SITE BEEN APPROVED BY THE COUNTY IN WHICH THE SITE IS LOCATED? N/A ☐ Yes ☐ No
2. HAS THE PROPOSED SITE BEEN APPROVED BY THE MUNICIPALITY IN WHICH IT WILL BE LOCATED? ☐ Yes ☒ No

B. REQUIREMENTS

1. ARE THERE ANY CERTIFICATES, PERMITS, OPERATION REQUIREMENTS, OR LICENSES REQUIRED BY ANY OF THE FOLLOWING?
A. MUNICIPALITY? (If Yes, Describe) None known to be required at this time ☐ Yes ☐ No
B. PLANNING COMMISSION? (If Yes, Describe) ☐ Yes ☒ No

ENVIRONMENTAL PROTECTION
 DEPARTMENT OF ENVIRONMENT AND
 WATER QUALITY MANAGEMENT

MODULE 5A - PHASE 1
 SUPPLEMENTARY GEOLOGY AND
 GROUNDWATER INFORMATION

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I. LOCATION (continued)

c. Other (describe) _____

(a) PROPOSED North _____ West _____ Latitude _____ Longitude _____
 (b) EXISTING North _____ West _____ Latitude _____ Longitude _____

B. Is the required large scale map showing the facility attached? ☒ YES ☐ NO

1. Is the large scale topographic map drawn to the following minimum scales?

a. Spray irrigation: scale 1" = 50' Contour interval 2' ☐ YES ☐ NO ☒ N/A

b. All other: scale 1" = 200' Contour interval 5' (2') ☒ YES ☐ NO ☐ N/A

2. Is the following information plotted on the large scale map

a. Location of soils/geologic/and hydrologic test pits, wells or borings? ☒ YES ☐ NO

b. The distribution system and nozzle locations of spray irrigation systems ☐ YES ☐ NO ☒ N/A

C. All of the following which occur within the site boundaries or within 0.25 mile of the site must be plotted on the large scale map and/or the 7.5 minute topographic map

Check the appropriate space

	7.5 min. topo map	large scale map	not applicable
1. Water wells	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Springs	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3. Swamps	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Streams	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
5. Public water supplies	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6. Other bodies of water	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7. Sinkholes	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8. Underground and/or surface mines	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
9. Mine pool discharge points	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
10. Mining spoil piles or mine dumps	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
11. Quarries	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
12. Sand and gravel pits	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
13. Gas and oil wells	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
14. Diversion ditches	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
15. All water quality monitoring points	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
16. Occupied dwellings	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17. Roads	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
18. Power lines	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
19. Pipelines	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
20. Public buildings	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
21. Abandoned canal	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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MODULE 5A - PHASE I
SUPPLEMENTARY GEOLOGY AND
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II. SOILS

- A. List each of the soil series and phases present on the site. See attached soils map.

Soil Series - Phase

1. Birdsall Silt Loam
2. Conotton - Coarse sandy loam & Gravelly Loam
3. Fredon - Loam
4. Wallington - Fine silt Loam & silt Loam
5. _____

- B. Is the required copy of the U.S.D.A. Soil Conservation Service soils map for the area showing site boundaries attached?

☒ YES ☐ NO

- C. Have borings or test pits been made to describe soils and determine their depth?

☒ YES ☐ NO

1. Are their locations shown on both the large scale map and the soils map?

☒ YES ☐ NO

2. The minimum thickness of soil to horizon(s) containing 60% or more coarse fragments is
- 36
- inches.

- a. How was soil thickness determined?
- Backhoe Excavation

3. Are the required pit or boring descriptions (by horizon) attached?

☒ YES ☐ NO

- D. The percolation rates for the soils are: (Complete where applicable. For example: spray irrigation, tile fields, seepage beds, etc.)

- | | <u>Soil Series</u> |
|--|--|
| 1. <u>0-0.63</u> inches/hour | <u>Birdsall Silt Loam Rda</u> |
| <u>Less than 0.2-20.0</u> inches/hour | <u>Conotton Series CkB, CgB, CgC, ChB, CmA</u> |
| <u>Less than 0.2 - 6.3</u> inches/hour | <u>Fredon Loam FaA</u> |
| 4. <u>0.63-2.0</u> inches/hour | <u>Wallington fine sandy loam WaA</u> |
| 5. <u>0.2-2.0</u> inches/hour | <u>Wallington silt loam WbA</u> |

- E. How were the percolation rates determined?
- From soil survey report USDA Series

1957, No. 9, Erie Co., Pa.

1. If percolation tests were run, are all percolation test holes shown on the soils map?
- ☐
- YES
- ☐
- NO

- F. What are the drainage characteristics of the soil?
- Range from very poorly drained

(Birdsall Series) to deep well-drained (Conotton Series)

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SUPPLEMENTARY GEOLOGY AND
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II. SOILS (continued)

G. What is the maximum slope at the proposed site? 8 percent.

H. What is the shallowest depth from the surface to mottling? 1" inches.

1. How was the above determined? Field Observation.

I. Is there a fragipan present?

☐ YES ☒ NO

1. What is the shallowest depth to the fragipan? _____ inches.

a. How was the above determined? Field Observation

Name and address of the soil scientist supplying the above data

Name John K. Kane, ALPG

Street 900 West Valley Forge Road

City and State King of Prussia, Pa. Zip 19406

Phone number (include area code) (215) 265-2700

Sources of Data

Erie County Soils Map

Field Observation

III. GEOLOGY

A. All of the following which occur within the site boundary or within 0.25 mile of the site are to be plotted on the large scale map and the 7.5 minute topographic map.

1. Location(s) of maximum and minimum thickness of glacial deposits
2. Lithologies
3. Areas where bedrock outcrops
4. Faults
5. Lineaments
6. Fracture traces
7. Directions of ground water flow

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SUPPLEMENTARY GEOLOGY AND
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III. GEOLOGY (continued)

B. Sediments

1. Is the site within the glaciated area of Pennsylvania? ☒ YES ☐ NO
2. Are there ☒ YES ☐ NO
 a. glacial deposits present under the proposed site? ☐ YES ☒ NO
 b. colluvial deposits ☐ YES ☒ NO
 c. alluvial deposits ☒ YES ☐ NO
 d. lacustrine deposits Of glacial origin
3. Describe the type and texture of the unconsolidated materials.
Ranged from silt and clay to coarse sand and gravel.
Greater than
 4. What is their maximum thickness? 17 feet.
 5. What is their minimum thickness? * feet. *No bedrock encountered on site.
 6. How were the thicknesses determined? Test pits dug with backhoe.
 7. Are the location(s) of maximum and minimum thicknesses shown on the large scale map? ☒ YES ☐ NO
 8. Discuss the effects of these materials on discharges from the proposed facility.
Material appears to be of sufficient thickness and texture to allow
natural renovation of leachate.

C. Bedrock

1. Formation name Conneaut Group
2. Lithologies (plot on large scale map if more than one lithology)
Alternating gray and brown, greenish and purplish shales and
siltstones.
3. Is the location of all places where the bedrock is less than 5 feet plotted on the large scale map? No bedrock exposed at proposed site, geologic formation determined using geologic map. ☒ YES ☐ NO
4. How were the locations determined? N/A
5. Does bedrock crop out within the boundaries or within 200 feet of the proposed facility? ☐ YES ☒ NO
6. Are all outcrops shown on the large scale map? N/A ☐ YES ☐ NO

MODULE 5A - PHASE I
SUPPLEMENTARY GEOLOGY AND
GROUNDWATER INFORMATION

FOR DEPARTMENT USE ONLY

GEOLOGY (continued)

Weathering

1. Characterize the degree of weathering N/A
2. Has a saprolite developed on the bedrock? N/A ☐ YES ☐ NO
 - a. What is the shallowest depth from the surface to bedrock. N/A feet.
Bedrock appears to be at a depth greater than 17'
 - b. Describe the texture N/A
3. If bedrock is a carbonate rock:
 - a. Are there any undrained surface depressions or sinkholes at the site? N/A ☐ YES ☐ NO
 - b. Are all sinkholes within 0.25 mile of the site shown on the 7.5 minute topographic map and/or on the large scale map? N/A ☐ YES ☐ NO

Structure

1. Are all lineaments and fracture traces on the site and within 0.25 miles of the site located on the 7.5 minute topographic map and/or the large scale map? None located in area of proposed site. ☐ YES ☐ NO
2. Briefly characterize these fractures, joints, etc. and discuss their control on the movement of infiltrating water and ground water. N/A
3. Describe the regional structure of bedrock in the area of the site? Horizontal strata of Devonian shale.
4. Give a detailed description of the local structure Area underlain by horizontal strata of Devonian shales belonging to Conneaut Group. East of the site along Elk Creek the flat-lying beds of the Canadaway Formation are exposed.

MODULE 5A - PHASE I
 SUPPLEMENTARY GEOLOGY AND
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III. GEOLOGY (continued)

5. Describe folding as it applies to the site No folding.
- a. Strike and plunge of fold axis are: N/A
 Strike _____ Plunge _____
- b. Location of site in relation to local structure N/A
6. Attitude of bedding Beds are horizontal
- a. Strike _____ and dip _____ of _____ formation.
- b. Strike _____ and dip _____ of _____ formation.
- c. Strike _____ and dip _____ of _____ formation.
7. Attitude of jointing Measurements taken along Elk Creek, in Canadaway Formation
- a. Strike N35°W and dip Vertical of joints.
- b. Strike N70°W and dip Vertical of joints.
- c. Strike N85°W and dip Vertical of joints.
- d. N40°W and dip Vertical of joints.
8. What is the respective spacing of these joints?
- a. 0.4' - 1.5'
- b. 2.0' - 3.0'
- c. 2.0' - 4.0'
- d. 0.5' - 1.0'
9. Are joints open? (explain) ☐ YES ☒ NO
- a. Joints appear to be relatively tight. Generally joints
- b. became very tight within several inches of upper surface
- c. of exposure.
10. Cleavage Horizontal, along bedding planes
- a. Strike _____ and dip _____ of cleavage.
- b. Strike _____ and dip _____ of cleavage.
- c. Strike _____ and dip _____ of cleavage.
11. Faults No faults noted
- a. Strike _____ and dip _____ of faults.
- b. Strike _____ and dip _____ of faults.
- c. Strike _____ and dip _____ of faults.
12. Are the locations of all faults that occur within 0.25 mile of the site's boundaries shown on the large scale map and 7.5 minute topographic map? ☐ YES ☒ NO
- No faults noted

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SUPPLEMENTARY GEOLOGY AND
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III. GEOLOGY (continued)

F. Land Use

1. Are there any active or inactive surface mines at the site or within 0.25 mile of the site? ☐ YES ☒ NO
2. Are there any active or inactive deep mines at the site or within 0.25 mile of the site boundaries? ☐ YES ☒ NO
 - a. What is the minimum depth to mined-out area? _____ feet
 - b. What is the areal extent of the mined out area _____
 - c. What mineral resource was extracted? _____
 - (1) If coal, name the seam(s) that were mined. _____

Sources of Data:

Geologic Map of Pennsylvania 1960

Pleistocene Stratigraphy of N.W. Pa., Geology Rpt. GSS, 1969

Glacial Geology of N.W. Pa., Geology Rpt. G 32, 1959

Personal Field Observation

Comments: (Attach additional sheets if necessary)

Name and address of geologist supplying the above data:

Name: John K. Kane, AIPG, A.W. Martin Associates, Inc.

Street: 900 W. Valley Forge Road

City & State King of Prussia, Pa. Zip 19406

Phone Number (include area code): (215) 265-2700

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MODULE 5A - PHASE I
SUPPLEMENTARY GEOLOGY AND
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IV. HYDROLOGY

- A. Have test pits X, borings _____, or wells _____ (check one or more) been made for the hydrologic investigation?

☒ YES ☐ NO

1. Is the required complete geologic description (log) of all earth materials penetrated included?

☒ YES ☐ NO

2. If a well, what was the method of drilling? _____

B. Depth to ground water table

1. The maximum depth to the water table within the site is 16.5+ feet.

a. Date of measurement Nov. 19, 1973

b. The location is shown on the 7.5 minute _____ or large scale X map (Pit 6s) (check one).

c. If measurement is from a well or pit, give date of completion for same Nov. 19, 1973

2. The minimum depth to the water table within the site is 3 feet.

a. Date of measurement Nov. 19, 1973

b. Is the location shown on the 7.5 minute _____ or large scale X map (Pit 14s) (check one).

c. If measurement is from a well or pit, give date of completion for same Nov. 19, 1973

3. Describe seasonal water table fluctuations at the above locations. Bull. W3 Groundwater in NW Pa. indicates a range in water table fluctuations from 0.5' to 11.0'. Although no definitive date is available for the proposed site, it is estimated that the fluctuations will be less than 3' due to local topography and good drainage characteristics of most of the soils.

4. Describe all perched or special water table conditions.

See comment section

5. Does ground water drain to deep mines?

☐ YES ☒ NO

- C. Have you shown the direction(s) of ground water movement from the site on the X large scale or X 7.5 minute map (check one)?

☒ YES ☐ NO

- a. Describe how the above was determined:

Analyses existing topography and water levels obtained from the test pits.

DATE:

DATE RECEIVED:

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IV. HYDROLOGY (continued)

b. The location of the ground water discharge point(s) affected by this facility is Elk Creek is major groundwater discharge point in area.

c. Discuss the rate of ground water flow at this site as it applies to the operation of this facility Rate of flow unknown at this time

D. Describe below the proposed ground water quality monitoring points for approval. (For sanitary landfills, monitoring point proposals are subject to final approval of the Engineering Design Plans. No wells are to be drilled until final approval of the Engineering Design Plans.) Use numbers only and number all monitoring points consecutively.

1. Wells, (check one) For multiple wells indicate with monitoring point number (a) for existing and (b) for proposed.

(a) For existing wells complete the table below.

(b) X For proposed new well construction, complete the table from your specifications.

MONITORING POINT NUMBER	DRILLING METHOD	DEPTH	DIAMETER	CASING		LOCATION*2		SURFACE ELEVATION
				SIZE & DEPTH	ZONES*1	INCHES NORTH	INCHES WEST	
1	Cabletool	35'	6"	6"	-	1.65"	16.9"	715
2	"	30'	6"	4"	10'-30'	1.05"	16.93"	716
3	"	30'	6"	4"	8'-30'	1.08"	16.1"	719
4	"	35'	6"	4"	7'-35'	1.42"	15.96"	721
5	"	30'	6"	4"	14'-30'	1.80"	16.19"	714

*1 What zones or at what depth is the casing perforated?

*2 Measured from the southeast corner of the 7.5 minute topographic map.

6 2. Springs 30' 6" 4" 13'-30' 2.23" 16.3" 696

MONITORING POINT NUMBER	ELEVATION	RATE OF FLOW (gpm)	DATE OF MEASUREMENT	LOCATION*	
				INCHES NORTH	INCHES WEST
1 Spr (7)	675	3-5	8/22/74	1.68"	15.56"

*Measured from the southeast corner of the 7.5 minute topographic map

NOTE: Phase II must be completed within 60 days after the monitoring points are approved and the permit is issued.

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IV. HYDROLOGY (continued)

Name and address of geologist or hydrogeologist supplying the above data:

Name: John K. Kane, AIPG A.W. Martin Associates, Inc.Street: 900 West Valley Forge RoadCity & State: King of Prussia, Pa. Zip: 19406Phone Number (include area code) (215) 265-2700

Sources of Data:

Personal on-site observationGroundwater in Northwestern, Pa., Bull W3, 1934

Comments (attach additional sheets if necessary)

IV B 4. An area located along the south central margin ofthe site is poorly drained and perched due in part to the poor drainage charac-
teristics of the underlying soil, and in part to restricted surface drainage
caused by the damming action of the railroad fill and partially silted up
culvert that crosses under the railroad.

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V. CLIMATOLOGY AND FLOODING

A. Will this be an all-season operation?

☒ YES ☐ NO

1. If seasonal, include operating dates _____ to _____

B. Precipitation data: For a sanitary landfill requiring collection and treatment of leachate
complete 1, 2, 3, 5 & 6.
For spray irrigation complete 3, 4, 5 & 6.
For impoundments complete 2, 5 & 6.

1. Maximum precipitation	inches/yr	55.04	
2. Average precipitation	inches/yr	37.13	
3. Maximum monthly precipitation	Month	July	in 13.27 (1947)
4. Minimum monthly precipitation	Month	Oct.	in 00.02 (1924)
5. Station of record	Erie, Pa.		
6. Length of historical record	Since 1875		

C. Flooding Frequency

1. Will all or part of the site be inundated? (check one)

- a. _____ once in 5 years or more
 b. _____ once in 10 years
 c. _____ once in 25 years
 d. _____ once in 50 years
 e. _____ once in 100 years
 f. ☒ never

D. Source of flooding information _____

VI. IMPOUNDMENTS

Answer the following questions for impoundments only

A. How will the sides and bottom of the impoundment be made impervious?

☐ YES ☐ NO

Briefly describe or explain _____

B. Will the surrounding area be graded or diked to prevent surface water from entering the impoundment?

☐ YES ☐ NO

Briefly describe or explain _____

C. Will the sides be constructed to maintain a two (2) foot free-board, and be protected against wave action?

☐ YES ☐ NO

D. How will the impoundment be protected from acts of third parties? _____

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MODULE 5A - PHASE I SUPPLEMENTARY GEOLOGY AND GROUNDWATER INFORMATION

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VII. DISCHARGE TO GROUND WATER

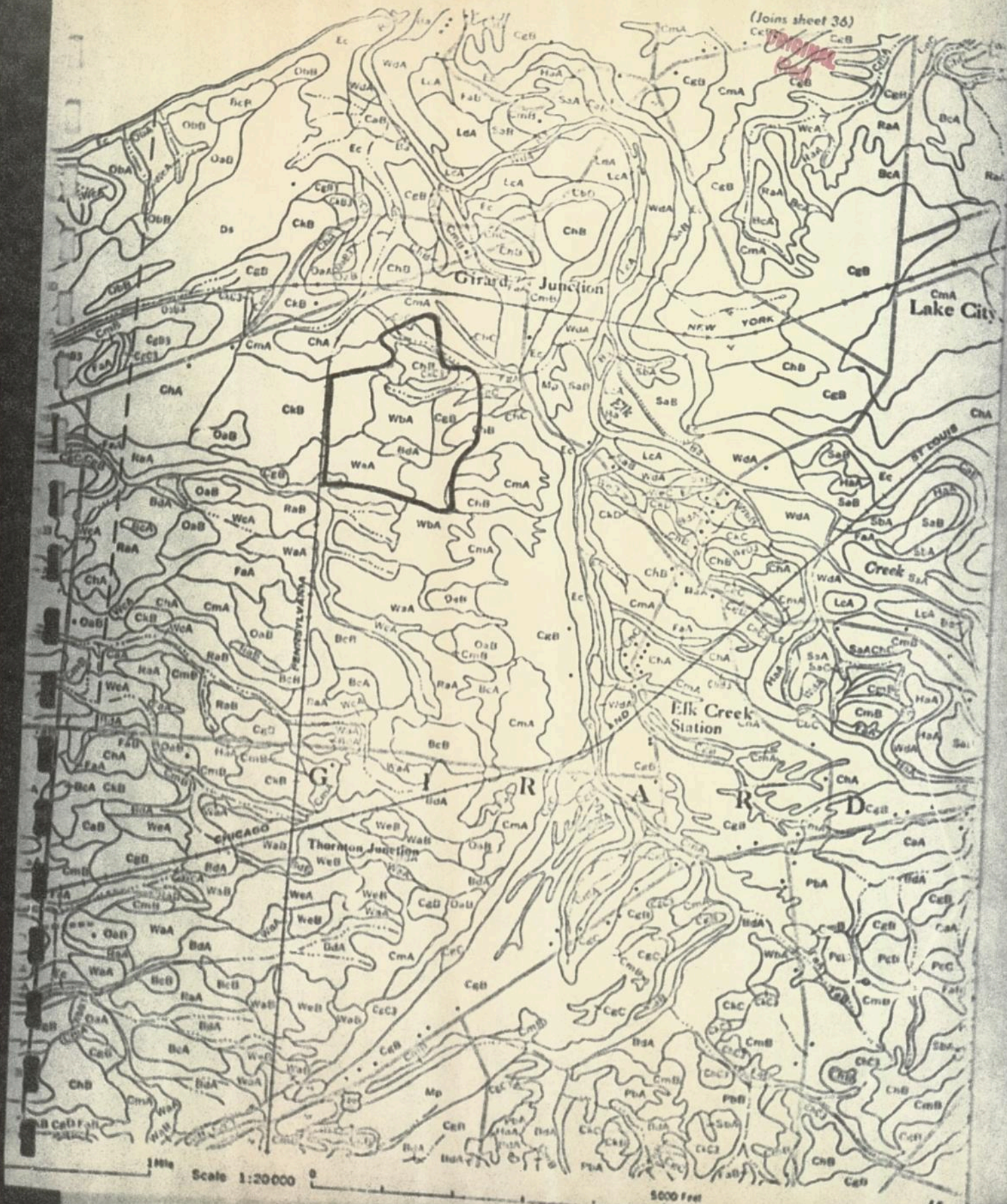
A. If there is a discharge or a potential discharge to ground water, background water quality must be determined

1. How was background water quality determined?

Describe Background water Quality unknown at this time. Water Quality samples will be taken after construction of monitor wells.

2. What is the background water quality?

a. Temperature	degrees C	
b. pH		
c. Alkalinity		
d. Total solids		
e. Suspended solids		
f. Settleable solids		
g. MBAS		
h. BOD 5 day		
i. COD 25 w $K_2Cr_2O_7$		
j. Specific conductance	Micromhos	
k. Total iron	mg/l	
l. Manganese	mg/l	
m. Aluminum	mg/l	
n. Copper	mg/l	
o. Zinc	mg/l	
p. Nickel	mg/l	
q. Chromium	mg/l	
r. Sulfate		
s. Chloride		
t. Fluoride		
u. Kjeldahl Nitrogen		
v. Ammonia Nitrogen		
w. Nitrate Nitrogen		
x. Phosphorus		



ORIGINAL
(Red)



G I R A R D T W P.

⊕ TEST PITS

SCALE - 1" = 800'

EMIE COUNTY
SOLID WASTE

A. V. MARTIN ASSOCIATES, INC.
Consulting Engineers
KING OF PRUSSIA, PA. PHILADELPHIA, PA.

2796

Disposal Site Inspection Form - Pit Description - Soils

ORIGINAL
(Red)Name of Site: Fairview Evergreen Nursey
North Creek Road Site

Weather: Clear

Date: October 3, 1973

Type Site: Rolling Upland

Pit # 1 - Location: See Plan, Surface Elevation 723.3

Depth of hole: 9.5'

Depth to water table: 9.0' (Elevation 714.3)

Depth to bedrock: None

Visible horizons:

0.0' - 6.5', Brown Clayey gravelly till

6.5' - 9.5', Brown gravelly sand

Pit # 2 - Location: See Plan, Surface Elevation 720.0

Depth of hole: 9.0'

Depth to water table: 8.5' (Elevation 711.5)

Depth to bedrock: None

Visible horizons:

0.0' - 8.5', Brown sand with clay and gravel

8.5' - 9.0', Gray very fine grained sand

Pit # 3 - Location: See Plan, Surface Elevation 713.0

Depth of hole: 11.0'

Depth to water table: None

Depth to bedrock: None

Visible horizons:

0.0' - 3.5', Brown sandy till

3.5' - 11.0', Brown fine gravel and sand

Disposal Site Inspection Form - Pit Description - Soils **ORIGINAL (Red)**

Name of Site: Fairview Evergreen Nursery
North Creek Road, Site 70
Date: November 19, 1973

Weather: Clear

Type Site: Rolling Upland

Pit # 4 s - Location: See Plan, Surface Elevation 710.0

Depth of hole: 14.5'

Depth to water table: 14.5' (Elevation 695.5)

Depth to bedrock: None

Visible horizons:

- 0.0' - 3.0'; Brown topsoil and till.
- 3.0' - 8.0'; Brown gravel.
- 8.0' - 14.5'; Brown sand and silt with fine gravel.

Pit # 5 s - Location: See Plan, Surface Elevation 718.0

Depth of hole: 15.0'

Depth to water table: None

Depth to bedrock: None

Visible horizons:

- 0.0' - 2.0'; Brown topsoil and till.
- 2.0' - 13.0'; Fine to coarse gravel with brown sand and silt.

Pit # 6 s - Location: See Plan, Surface Elevation 716.0

Depth of hole: 16.5'

Depth to water table: None

Depth to bedrock: None

Visible horizons:

- 0.0' - 4.0'; Brown sand with silt and gravel.
- 4.0' - 6.0'; Gravel and sand.
- 6.0' - 10.0'; Brown silt and very fine grained sand.
- 10.0' - 16.5'; Brown fine to medium grained sand.

Disposal Site Inspection Form - Pit Description - Soils

ORIGINAL
(Red)

Name of Site: Fairview Evergreen Nursery Weather: Clear
North Creek Road Site
Date: October 4, 1973 Type Site: Rolling Upland

Pit # 7 - Location: See Plan, Surface Elevation 720.0

Depth of hole: 11.0'

Depth to water table: None

Depth to bedrock: None

Visible horizons:

0.0' - 4.5', Brown sandy till

4.5' - 11.0', Brown sand with a small amount of gravel

Pit # 8 - Location: See Plan, Surface Elevation 719.0

Depth of hole: 9.5'

Depth to water table: None

Depth to bedrock: None

Visible horizons:

0.0' - 3.0', Brown till

3.0' - 6.0', Brown fine grained sand with gravel and silt

6.0' - 9.5', Brown very fine grained sand and silt

Pit # 9 - Location: See Plan, Surface Elevation 718.0

Depth of hole: 5.0'

Depth to water table: 4.0' (Elevation 714.0)

Depth to bedrock: None

Visible horizons:

0.0' - 3.0', Gray mottled very fine grained sand

3.0' - 5.0', Gray sand with some gravel

In middle of drainage area, soggy ground surface and standing water.

ORIGINAL
(Red)

Disposal Site Inspection Form - Pit Description - Soils

Name of Site: Fairview Evergreen Nursery Weather: Clear
North Creek Road Site
Date: October 4, 1973 Type Site: Rolling Upland

Pit # 10 - Location: See Plan, Surface Elevation 720.0

Depth of hole: 6.0'

Depth to water table: 5.0' (Elevation 715.0)

Depth to bedrock: None

Visible horizons:

0.0' - 5.0', Gray brown sand and silt with gravel and shale fragments

5.0' - 6.0', Gray sand
(located just south of drainageway)Pit # 11 - Location: See Plan, Surface Elevation 721.0

Depth of hole: 7.5'

Depth to water table: 7.0' (Elevation 714.0)

Depth to bedrock: None

Visible horizons:

0.0' - 3.0', Brown till with layer of cobbles at 3.0'

3.0' - 7.5', Brown sand

Pit # 12 - Location: See Plan, Surface Elevation 713.0

Depth of hole: 10.0'

Depth to water table: 10.0' (Elevation 703.0)

Depth to bedrock: None

Visible horizons:

0.0' - 2.5', Brown sandy till

2.5' - 10.5', Brown sand and gravel with silt

Disposal Site Inspection Form - Pit Description - Soils

ORIGINAL
(Red)Name of Site: Fairview Evergreen Nursery Weather: Clear
North Creek Road Site

Date: October 4, 1973

Type Site: Rolling Upland

Pit # 13 - Location: See Plan, Surface Elevation 709.2
Depth of hole: 9.5'
Depth to water table: Slight seepage at 8.0' (Elevation 701.2)
Depth to bedrock: None
Visible horizons:

0.0' - 3.0', Brown till
3.0' - 8.0', Brown sand and gravel
8.0' - 9.5', Yellow brown silt

Pit # 14 - Location: See Plan, Surface Elevation 711.0
Depth of hole: 11.5'
Depth to water table: None
Depth to bedrock: None
Visible horizons:

0.0' - 4.0' Brown till
4.0' - 11.5', Brown sand and gravel

Pit # 15 - Location: See Plan, Surface Elevation 695.65
Depth of hole: 5.0'
Depth to water table: 4.8' (Elevation 690.85)
Depth to bedrock: None
Visible horizons:

0.0' - 2.0', Brown till
2.0' - 5.0', Gray brown sand and gravel

ORIGINAL
(Red)

Disposal Site Inspection Form - Pit Description - Soils

Name of Site: Fairview Evergreens Nursery Weather: Clear
Nursery, North Creek Road, Site 70

Date: November 19, 1973

Type Site: Rolling Upland

Pit # 1 - Location: See Plan, Surface Elevation 706.3

Depth of hole: 17'

Depth to water table: 16' (Elevation 690.3)

Depth to bedrock: None

Visible horizons:

0.0' - 3.0';	Brown topsoil and till
3.0' - 6.6';	Brown gravel and very fine grained sand.
6.6' - 9.0';	Brown silt and very fine grained sand.
9.0' - 11.0';	Brown gravel, sand and silt.
11.0' - 17.0';	Brown very fine grained sand and silt.

Pit # 2 - Location: See Plan, Surface Elevation 706.8

Depth of hole: 16'

Depth to water table: 16' (Elevation 690.8)

Depth to bedrock: None

Visible horizons:

0.0' - 3.0';	Brown topsoil and till
3.0' - 5.0';	Brown gravel and very fine grained sand.
5.0' - 6.0';	Brown silt and sand.
6.0' - 9.0';	Brown gravel and very fine grained sand.
9.0' - 11.0';	Sandy silt.

Pit # 3 - Location: See Plan, Surface Elevation 711.0

Depth of hole: 14.5'

Depth to water table: None (slight dampness)

Depth to bedrock: None

Visible horizons:

0.0' - 1.0';	Brown topsoil and till
1.0 - 10.0;	Fine to coarse gravel and sand.
10.0' - 14.0';	Fine gravel and brown silt and very fine grained sand.
14.0' - 14.5';	Gray clay

Disposal Site Inspection Form - Pit Description - Soils ~~ORIGINAL~~
(Red)

Name of Site: Fairview Evergreen Nursery
North Creek Road, Site 70
Date: November 19, 1973

Weather: Clear

Type Site: Rolling Upland

Pit # 4 s - Location: See Plan, Surface Elevation 710.0

Depth of hole: 14.5'

Depth to water table: 14.5' (Elevation 695.5)

Depth to bedrock: None

Visible horizons:

- 0.0' - 3.0'; Brown topsoil and till.
- 3.0' - 8.0'; Brown gravel.
- 8.0' - 14.5'; Brown sand and silt with fine gravel.

Pit # 5 s - Location: See Plan, Surface Elevation 718.0

Depth of hole: 15.0'

Depth to water table: None

Depth to bedrock: None

Visible horizons:

- 0.0' - 2.0'; Brown topsoil and till.
- 2.0' - 13.0'; Fine to coarse gravel with brown sand and silt.

Pit # 6 s - Location: See Plan, Surface Elevation 716.0

Depth of hole: 16.5'

Depth to water table: None

Depth to bedrock: None

Visible horizons:

- 0.0' - 4.0'; Brown sand with silt and gravel.
- 4.0' - 6.0'; Gravel and sand.
- 6.0' - 10.0'; Brown silt and very fine grained sand.
- 10.0' - 16.5'; Brown fine to medium grained sand.

ORIGINAL
(Red)

Disposal Site Inspection Form - Pit Description - Soils

Name of Site: Fairview Evergreen Nursery
North Creek Road, Site 70
Date: November 19, 1973

Weather: Clear

Type Site: Rolling Upland

Pit # 7 s - Location: See Plan, Surface Elevation 697.5

Depth of hole: 15.0'

Depth to water table: 15.0' (Elevation 682.5)

Depth to bedrock: None

Visible horizons:

- 0.0' - 4.0'; Brown sand with silt and gravel.
- 4.0' - 7.0'; Gravel and sand.
- 7.0' - 15.0'; Brown fine to coarse grained sand with silt and fine gravel.

Pit # 8 s - Location: See Plan, Surface Elevation 707.0

Depth of hole: 15.0'

Depth to water table: 14.0' (Elevation 693.0)

Depth to bedrock: None

Visible horizons:

- 0.0' - 3.0'; Brown topsoil and till.
- 3.0' - 5.0'; Gravel and sand.
- 5.0' - 7.0'; Brown silt with very fine grained sand.
- 7.0' - 15.0'; Brown sand with fine gravel.

Pit # 9 s - Location: See Plan, Surface Elevation 715.0

Depth of hole: 16.5'

Depth to water table: None

Depth to bedrock: None

Visible horizons:

- 0.0' - 1.5'; Brown topsoil and till.
- 1.5' - 8.0'; Gravel and sand.
- 8.0' - 16.5'; Brown very fine grained sand and silt.

Disposal Site Inspection Form - Pit Description - Soils

ORIGINAL
(Red)

Name of Site: Fairview Evergreen Nursery

Weather: Clear

North Creek Road, Site 70

Date: November 19, 1973

Type Site: Rolling Upland

Pit # 10 s - Location: See Plan, Surface Elevation 720.0

Depth of hole: 15.0'

Depth to water table: None

Depth to bedrock: None

Visible horizons:

- 0.0' - 3.0'; Brown topsoil and till.
- 3.0' - 5.0'; Gravel with sand.
- 5.0' - 7.5'; Brown fine to coarse grained sand.
- 7.5' - 15.0'; Brown silt.

Pit # 11 s - Location: See Plan, Surface Elevation 719.0

Depth of hole: 15.0'

Depth to water table: None

Depth to bedrock: None

Visible horizons:

- 0.0' - 7.0'; Brown sand and silt with sporadic gravel.
- 7.0' - 15.0'; Gray fine grained sand and clayey silt.

Pit # 12 s - Location: See Plan, Surface Elevation 720.0

Depth of hole: 12.0'

Depth to water table: None

Depth to bedrock: None

Visible horizons:

- 0.0' - 2.0'; Brown topsoil and till.
- 2.0' - 4.0'; Mottled brown clayey silt.
- 4.0' - 8.0'; Brown silt.
- 8.0' - 12.0'; Gray silt with clay.

ORIGINAL
(Red)

Disposal Site Inspection Form - Pit Description - Soils

Name of Site: Fairview Evergreen Nursery Weather: Clear
 North Creek Road, Site 70
 Date: November 19, 1973 Type Site: Rolling Upland

Pit # 13 s - Location: See Plan, Surface Elevation 719.0
 Depth of hole: 10.0'
 Depth to water table: 8.0' (seepage starts at depth of 4.0') (Elevation 711.0 - 715.0)
 Depth to bedrock: None
 Visible horizons:
 0.0' - 1.5'; Brown topsoil and till.
 1.5' - 3.5'; Brown mottled silt and sand.
 3.5' - 6.0'; Brown sand and gravel.
 6.0' - 10.0'; Gray sand and gravel.

Pit # 14 s - Location: See Plan, Surface Elevation 720.0
 Depth of hole: 6.0'
 Depth to water table: 3.0' (Elevation 717.0)
 Depth to bedrock: None
 Visible horizons:
 0.0' - 2.5'; Brown mottled sand silt and clay.
 2.5' - 6.0'; Gray sand with gravel.

Pit # 15 s - Location: See Plan, Surface Elevation 701.1
 Depth of hole: 14.0'
 Depth to water table: None
 Depth to bedrock: None
 Visible horizons:
 0.0' - 3.0'; Brown topsoil and till.
 3.0' - 6.0'; Gravel with brown sand and silt.
 6.0' - 13.0'; Brown sand.
 13.0' - 14.0'; Gray sand.

Disposal Site Inspection Form - Pit Description - Soils

ORIGINAL
(Red)

Name of Site: Fairview Evergreen Nursery
North Creek Road, Site 70

Weather: Clear

Date: November 19, 1973

Type Site: Rolling Upland

Pit # 16s - Location: See Plan, Surface Elevation 720.0

Depth of hole: 10.0'

Depth to water table: 9.0' (Elevation 711.0)

Depth to bedrock: None

Visible horizons:

- 0.0' - 2.2'; Brown topsoil and till.
- 2.2' - 4.5'; Gravel and rock fragments and sand.
- 4.5' - 10.0'; Brown silt and very fine grained sand.

Pit # 17s - Location: See Plan, Surface Elevation 709.0

Depth of hole: 11.5'

Depth to water table: 9.6' (Elevation 699.4)

Depth to bedrock: None

Visible horizons:

- 0.0' - 2.0'; Brown topsoil and till.
- 2.0' - 6.0'; Gravel and sand.
- 6.0' - 9.6'; Brown fine grained sand.
- 9.6' - 11.5'; Gray fine grained sand, iron staining on upper portion.

Pit # 18s - Location: See Plan, Surface Elevation 710.0

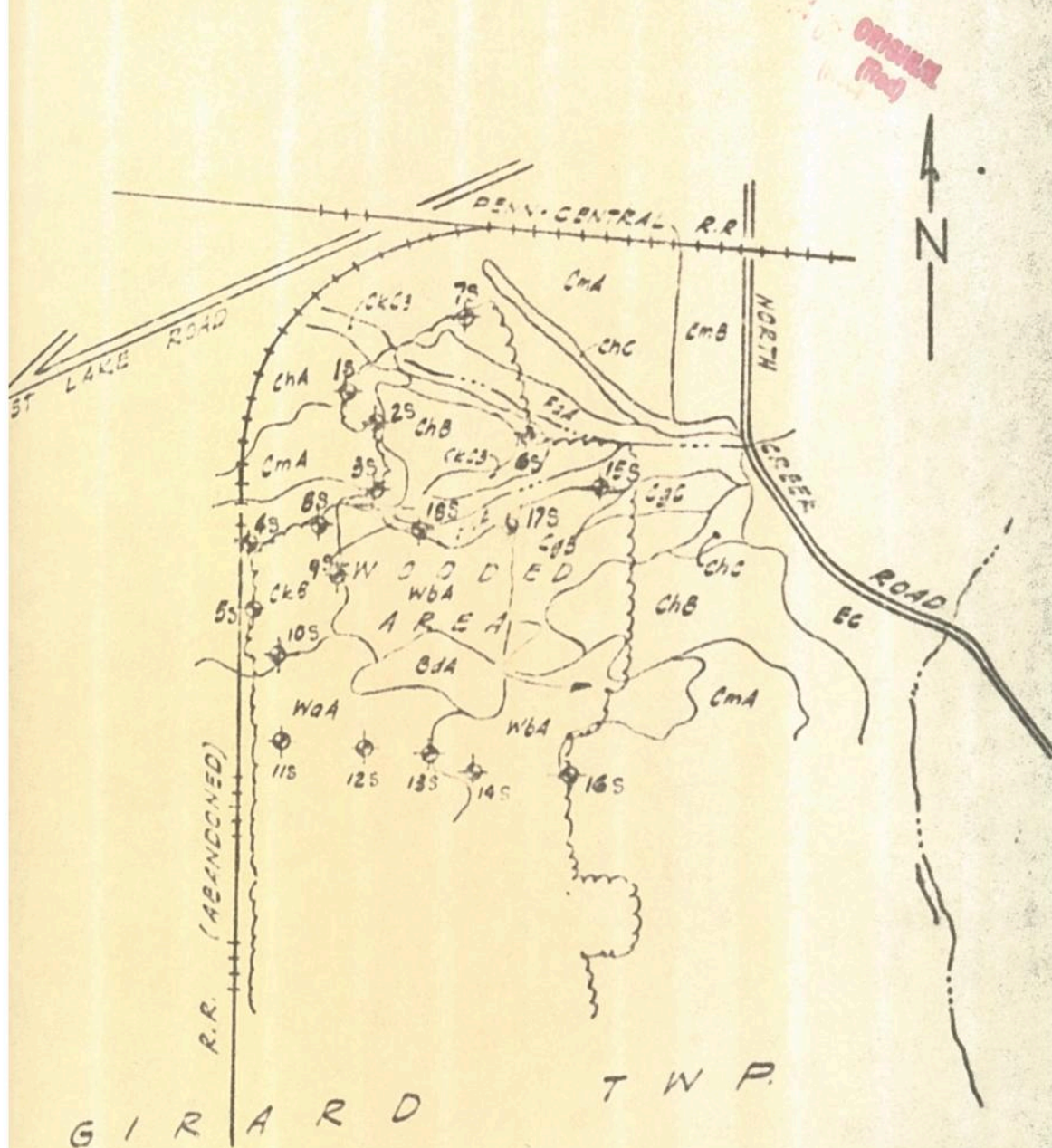
Depth of hole: 15.0'

Depth to water table: None

Depth to bedrock: None

Visible horizons:

- 0.0' - 2.5'; Brown topsoil and till.
- 2.5' - 7.6'; Brown silt.
- 7.6' - 9.0'; Sand and gravel.
- 9.0' - 15.0'; Brown silt.



SCALE: 1" = 500'

TEST PITS

FIGURE 15

ERIE COUNTY
SOLID WASTE

A. W. MARTIN ASSOCIATES, INC.
Consulting Engineers
KING OF PRUSSIA, PA. PHILADELPHIA, PA.

2796

ORIGINAL
FILED

Division of Solid Waste Management
980 North Hermitage Road
Sharon, Pennsylvania 16146
December 30, 1974

(412) 346-3571

CERTIFIED MAIL

953110

Erie County Solid Waste Authority
96 West Second Street
Erie, Pennsylvania 16507

Attention: Mr. Samuel Hayes, Chairman

Subject: North Creek Road Site #70
North Creek Road
Girard Township Erie County

- References:
- (1) Application for Permit for Solid Waste Disposal Facilities.
 - (2) Site Application Module Phase I.
 - (3) Module 5A-Phase I.
Supplementary Geology and Groundwater Information.
 - (4) Topographic and site plan revised August 26, 1974.

For Mr. Hayes.

Review of the above referenced submission has been completed by the technical staff of the Division of Solid Waste Management.

We have the following comments concerning your application, submitted on your behalf by A. W. Martin Associates, Incorporated:

- (1) There are two (2) minor discrepancies in the application. The number of acres proposed to be landfilled on the application differs from that indicated on the site plan. The site lease period is less than the anticipated site life.

- If you have any questions concerning this review, please contact this office.

Russell L. Crawford
Regional Solid Waste Director

cc: A. W. Martin Associates, Incorporated
Erie County Department of Health
~~Division of Solid Waste Management~~ - Harrisburg (2)
Alan Welch, Regional Geologist
John Dovak, Regional Soil Scientist
files.